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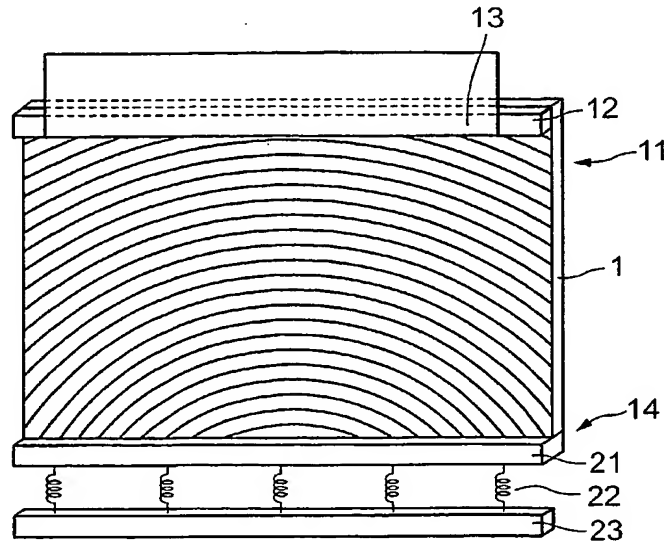
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(54) Title: INSTALLATION STRUCTURE FOR FRESNEL LENS SHEET AND REAR-PROJECTION DISPLAY DEVICE

(54) 発明の名称: フレネルレンズシートの取付構造および背面投射型表示装置



(57) Abstract: An installation structure for a Fresnel lens sheet and a rear-projection display device with the structure, the structure being able to retain in excellent planarity a Fresnel lens sheet in the display device, the lens being easily removed from a die in production. An installation structure is for a Fresnel lens sheet (1) with a thickness of 3 mm or less having triangular prisms arranged on the light incoming side of the lens sheet. A prism has an entrance face and a total reflection face totally reflecting part or the whole of light incoming from the entrance face and polarizing it to a desired direction. The structure has a suspension member (12) installed on a top side (11) of a Fresnel lens sheet (1) and a support member (13) for supporting the suspension member (12). It is preferable that a tension-applying member (21) is attached to the lens sheet (1).

(57) 要約: 製造時に金型から離型し易い薄型のフレネルレンズシートを、背面投射型表示装置に平面性よく保持することができるフレネルレンズシートの取付構造およびその取付構造を備

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VC, VN, YU, ZA, ZM, ZW.

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CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,

添付公開書類:

— 国際調査報告書

2文字コード及び他の略語については、定期発行される  
各PCTガゼットの巻頭に掲載されている「コードと略語  
のガイダンスノート」を参照。

えた背面投射型表示装置を提供する。入射面と当該入射面から入射する光の一部または全部を全反射して所望の  
方向に偏向する全反射面とからなる三角形のプリズムが入射光側に配列された厚さ3mm以下のフレネルレンズ  
シート1の取付構造であって、フレネルレンズシート1の上辺11に装着された吊り下げ部材12と、当該吊り下  
げ部材12を支持する支持部材13とを備えるように構成した。このとき、フレネルレンズシート1に張力付加部  
材21が装着されていることが好ましい。

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/003654

A. CLASSIFICATION OF SUBJECT MATTER  
Int.Cl<sup>7</sup> G03B21/62, G03B21/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> G03B21/62, G03B21/10

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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Kokai Jitsuyo Shinan Koho	1971-2004	Jitsuyo Shinan Toroku Koho	1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2001-228546 A (Matsushita Electric Industrial Co., Ltd.), 24 August, 2001 (24.08.01), Full text; all drawings (Family: none)	1-12
Y	JP 7-43713 Y2 (Dainippon Printing Co., Ltd.), 09 October, 1995 (09.10.95), Full text; all drawings (Family: none)	1-12
Y	JP 1-302338 A (Sony Corp.), 06 December, 1989 (06.12.89), Full text; all drawings (Family: none)	1-12

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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"&" document member of the same patent family

Date of the actual completion of the international search  
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Name and mailing address of the ISA/  
Japanese Patent Office

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International application No.

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2002-196413 A (NEC View Technology, Ltd.), 12 July, 2002 (12.07.02), Full text; all drawings (Family: none)	1-12
Y	JP 2001-66701 A (Mitsubishi Rayon Co., Ltd.), 16 March, 2001 (16.03.01), Full text; all drawings & WO 00/38005 A1 & EP 1152286 A1 & US 6556347 B1 & KR 01/99829 A	9-12
A	JP 7-43835 A (Dainippon Printing Co., Ltd.), 14 February, 1995 (14.02.95), Full text; all drawings (Family: none)	1-12